

Abstracts

A77

study demonstrated that non-adherence to atypical antipsychotics leads to more hospitalizations and hospital days in the treatment of schizophrenia.

PMH41

PREDICTORS OF SWITCHING ANTIPSYCHOTICS IN THE TREATMENT OF SCHIZOPHRENIA

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OBJECTIVES: To identify which patient baseline characteristics and which types of early changes in patients' clinical status are most predictive of switching antipsychotics in the long-term treatment of schizophrenia. **METHODS:** This post-hoc analysis used data from a randomized, open-label, multi-site, one-year cost-effectiveness trial of olanzapine, risperidone, and typical antipsychotics in the treatment of schizophrenia. Study protocol permitted switching of antipsychotics when clinically warranted. Baseline characteristics were assessed using standard psychiatric measures and systematic review of medical records. In addition to baseline socio-demographics, co-morbid medical and psychiatric conditions, body weight, clinical, and functional characteristics, the prediction model included change scores on clinical measures (PANSS, five PANSS factor subscales, Barnes Akathisia Scale, Simpson Angus Scale) during the first two weeks of treatment. Cox proportional hazards model was used to identify the best predictors of switching from patients' initial randomized antipsychotic. **RESULTS:** About one-third (29.5%, 190/644) switched antipsychotics before the end of the one-year trial. Five variables were identified as best predictors of switching during the 1-year trial ($p < 0.05$): absence of antipsychotic use in the prior year, pre-existing depression, lack of lifetime substance use disorder, less improvement or worsening following two weeks of treatment on either clinician-rated akathisia (Barnes Akathisia Scale), and/or anxiety/depression symptoms (PANSS). A strong trend was observed for female gender ($p = 0.058$). **CONCLUSIONS:** Switching of antipsychotics appears to be prevalent in the naturalistic treatment of schizophrenia, and can be predicted by a small and distinct set of measures. Interestingly, pre-existing depressive symptomatology and less improvement or worsening of anxiety and depressive symptoms following two weeks of treatment were among the more robust predictors of future switching of antipsychotics in this one-year study.

PMH42

COMPLIANCE AND PERSISTENCE: A COMPARISON BETWEEN TYPICAL AND ATYPICAL ANTIPSYCHOTIC TREATMENT OF SCHIZOPHRENIA PATIENTS

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OBJECTIVES: To determine and compare the compliance and persistence to typical and atypical antipsychotics in the treatment of schizophrenia patients. **METHODS:** The study was based on NC Medicaid claims database. Patients were included if they had a diagnosis of schizophrenia (ICD-9 295.XX), received at least two antipsychotic prescriptions during the period after index date and were continuously enrolled in NC Medicaid Program during three month prior and one year post treatment periods. Medication possession ratio (MPR), persistence and medication use gap were used as compliance measures. Both descriptive and multivariate model were conducted to determine the difference in adherence/persistence to antipsychotic medications between typical and atypical antipsychotic. **RESULTS:** A total of 919

patients (469 in typical and 450 in atypical) met the selection criteria for 3-month prior and 12-month after antipsychotic treatment. There were statistically significant differences between typical and atypical antipsychotics in terms of demographics, comorbidities, resource utilization in prior period, and adherence. As compared with those in typical groups, patients in atypical group were significantly younger (42.3 vs. 44.4, $p = 0.0195$), less blacks (33.1% vs. 58.4%), had more comorbid diseases (2.7 vs. 2.3, $p = 0.0025$), more hospital visits (0.3 vs. 0.17, $p = 0.002$) and greater total costs in prior period (\$2703 vs. \$2010, $p = 0.012$). The costs and utilization in prior period indicated that patients in atypical groups were sicker than those in typical groups. Patients in atypical group were more adherent to antipsychotics (35.8% vs. 16.4%, $p < 0.0001$), less gaps (42.4% vs. 67%, $p < 0.0001$), and stayed consistently in medication longer (229 days vs. 146 days). **CONCLUSIONS:** The results from this study indicated that there existed significant differences in terms of demographics, compliance and persistence between typical and atypical antipsychotics in the treatment of schizophrenia.

PMH43

RAMIFICATIONS OF SWITCHING ANTIPSYCHOTICS IN THE TREATMENT OF SCHIZOPHRENIA

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OBJECTIVES: To assess the clinical, functional, and economic ramifications of switching antipsychotics for any cause during treatment of schizophrenia. **METHODS:** We used outpatient data from a randomized, open-label, one-year cost-effectiveness trial of olanzapine, risperidone, and typical antipsychotics in the treatment of schizophrenia. Study protocol permitted switching of antipsychotics when clinically warranted. Resource utilization was abstracted from medical records. Treatment outcomes were assessed with standard psychiatric measures. Changes from pre-to-post switch were assessed among patients who switched from randomized antipsychotics. Switchers and non-switchers were compared on risk for crisis-related events (e.g., hospitalization). **RESULTS:** About one-third of the patients (30.2%, 185/612) were switched from randomized antipsychotics: 14.9% from olanzapine, 27.9% from risperidone, and 48.5% from typical antipsychotics. Following antipsychotic switch, switchers experienced significant improvements in symptoms and social relations ($p < 0.001$), and numerical cost reductions (\$3.72 per day less, $p = 0.320$). Compared to non-switchers, switchers were at significantly higher risk for crisis-related events ($p = 0.006$), experienced them sooner ($p = 0.004$), and accrued higher crisis-related service costs ($p < 0.05$). **CONCLUSIONS:** Although switching antipsychotics is an effective "rescue" option, it is costly in personal and economic terms. The optimal treatment strategy is to begin treatment with the antipsychotic most likely to lead to effective treatment for each individual patient.

PMH44

ECONOMIC CONSEQUENCES OF PATIENTS NOT ADHERING TO MEDICATIONS IN THE TREATMENT OF SCHIZOPHRENIA

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OBJECTIVES: To review the literature addressing the economic consequences of nonadherence in the treatment of schizophrenia. This study also seeks to extend the review results to provide

an update on the economic costs related to nonadherence to antipsychotics. **METHODS:** A systematic MEDLINE search for the years 1995–2004 was conducted to identify published English-language articles on the economic impact of medication nonadherence in schizophrenia. A manual search was also performed using the references of retrieved articles to identify additional studies. For a study to be included, the direct healthcare costs or the inpatient days related to nonadherence must have been specifically assessed or estimated. We extracted data on nonadherence rate, relapse rate, and inpatient days based on the identified studies, and derived the daily hospital costs for schizophrenia in 2001 from National Inpatient Sample of Healthcare Cost and Utilization Project. We then extrapolated the data to national level to obtain an estimate on the inpatient costs related to nonadherence to antipsychotics. **RESULTS:** A total of 7 studies were identified and assessed according to their study design, measurement of medication nonadherence, study setting, and cost outcome results. Although adherence measures varied across studies, all the studies reviewed showed that nonadherence to antipsychotic drugs was related to an increase in hospitalization rate, hospital days or hospital costs. Based on the results from selected studies, we estimated that the national rehospitalization costs related to nonadherence to antipsychotics ranged approximately from \$609 million to \$979 million in year 2001. **CONCLUSIONS:** There is a consensus in the literature that poor adherence to antipsychotic medications was associated with higher risk of relapse and rehospitalization and higher hospitalization costs. Future investigations need to search more effective interventions targeting specifically to nonadherent patients to improve patient outcomes and reduce health care costs.

PMH45

DURATION OF ANTIPSYCHOTIC SWITCHING PROCESS IN THE NATURALISTIC TREATMENT OF SCHIZOPHRENIA

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OBJECTIVES: To assess the duration of antipsychotic switching process in the naturalistic treatment of schizophrenia. **METHODS:** This post hoc analysis used data from a randomized, open-label, one-year trial of olanzapine, risperidone, and typical antipsychotics in the treatment of schizophrenia (N = 664), in which switching of antipsychotics was permitted, when clinically warranted. No suggestions were provided to clinicians as to which switching strategy to use or how long the switch process should last. The number of overlapping days between antipsychotics during each switch was calculated for all switching episodes in the study (N = 217), by antipsychotic type (typical, atypical), and by specific atypical antipsychotic (olanzapine, risperidone). **RESULTS:** Most of the switching between antipsychotics (58.5%) was abrupt, with complete discontinuation of the previous antipsychotic the same day or a day after the start of the new antipsychotic. Abrupt switching was most prevalent between the 2 atypical antipsychotics (75.9%), and least prevalent when switching from any typical to atypical antipsychotics (47.0%). The next most prevalent switching strategy involved cross titration lasting 1–7 days (16.0%). **CONCLUSIONS:** Abrupt switching appears to be the most prevalent antipsychotic switching strategy. Abrupt switching was previously found to provide outcomes comparable to other antipsychotic switching strategies in the treatment of schizophrenia.

PMH46

HEALTH-RELATED QUALITY-OF-LIFE MEASURED BY EQ-5D IN PATIENTS TREATED FOR DEPRESSION IN PRIMARY CARE

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OBJECTIVES: Depression is a prevalent psychiatric disorder associated with impaired patient functioning and reductions in health-related quality of life (HRQL). The present study describes the impact of depression on patients' HRQL and assesses the impact of antidepressant treatment on HRQL. **METHODS:** A total of 447 patients were recruited at 56 primary care centres to this naturalistic longitudinal observational study. Patients over 18 years with depressive symptoms, and who initiated a new antidepressant therapy were included in the study. Data on patients' socio-demographics, daily activity and quality-of-life (EQ-5D) were collected using questionnaires completed during outpatient GP visits for a follow-up period of 6 months. Disease severity was assessed with the Clinical Global Impression Severity scale (CGI-S). Regression analysis was employed to analyse the determinants of quality-of-life in depressed patients. **RESULTS:** The mean EQ-5D utility score at baseline was 0.47 (0.44–0.49). Milder cases of depression reported a health utility of 0.60, whereas moderately and severely depressed patients reported utility values of 0.46 and 0.27 respectively ($p < 0.001$). At end of follow-up the average utility in the sample was 0.69 (0.67–0.72), corresponding to an increase in utility by 0.23 over 6 months ($p < 0.001$). Our regression model showed that, all else equal, patients who were on sickleave were associated with 10% lower utility ($p < 0.0001$). Moreover, increased disease severity (assessed with CGI) was associated with decreased health-related quality of life. By treating the patient to achieve clinical remission is associated with higher quality of life and the presence of co-morbidity is associated with decreased quality-of-life. **CONCLUSIONS:** Depression has a substantial impact on health-related quality of life of the patient. Our results indicate that antidepressants are associated with significant improvement in EQ-5D index score over a course of 6 months. Self-reported patient valuations are important outcomes for cost-effectiveness analysis of new antidepressant compounds.

PMH47

THE MISSION IS REMISSION—HEALTH ECONOMIC CONSEQUENCES OF ACHIEVING REMISSION WITH ANTIDEPRESSANT TREATMENT FOR DEPRESSION

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Despite the increased focus over the past decade suggesting that full remission should be the primary goal of the treatment of depression, there are few studies investigating the health economic consequences of attaining remission in pharmacological treatment in clinical practice. **OBJECTIVE:** The aim of this study was to determine what impact full remission has on the cost and health-related quality-of-life of depressed patients. **METHODS:** Longitudinal data on patients' socio-demographics, daily activity, health care resource use, quality-of-life (EQ-5D) were collected using questionnaires completed during outpatient GP visit for a follow-up period of approximately 6 months. Patient recruitment and data collection were performed at about 56 primary care centres in Sweden and 447 patients were enrolled.